

REMARKS

The Office Action mailed June 17, 2004, has been received and reviewed. Claims 1 through 4, and 15 through 25 are currently pending in the application. Claims 1 through 4 stand rejected. Claims 15 through 25 have been allowed. Applicant has amended claims 1 and 2, entered new claims 26 and 27, and respectfully requests reconsideration of the application as amended herein.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 5,088,190 to Malhi et al.

Claims 1 through 4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Malhi et al. (U.S. Patent No. 5,088,190). Applicant respectfully traverses this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 1, as amended herein, is directed to an apparatus for routing interconnections among bond pads on a semiconductor die. The apparatus comprises: a sheet-like, nonconductive structure having a first surface, a second, opposing surface for attachment to the semiconductor die and a peripheral edge, wherein *a first zone is defined on the first surface adjacent the peripheral edge and a second zone is defined on the first surface, the second zone being located interiorly of, and circumscribed by, the first zone; a first plurality of electrically conductive discrete pads disposed in the first zone; and a second plurality of electrically conductive discrete pads attached to the first surface, the second plurality of electrically conductive discrete pads each having an electrical connect portion and an electrically isolated portion comprising a portion facing the first surface and a periphery defined thereabout, wherein each of the second plurality of electrically conductive discrete pads is located within the second zone.* Applicant submits that Malhi fails to teach all of the limitations of claim 1 of the presently claimed invention.

The Examiner cites Malhi as disclosing a semiconductor die comprising: “a sheet-like, nonconductive structure 30 having a first surface, and a second surface for attachment to the semiconductor die 11 or substrate 30; ... and a plurality of electrical conductive discrete pads 32 attached to the first surface, the plurality of electrically conductive discrete pads each having an electrical connection portion 32 and an electrical isolated portion 31 comprising a portion facing the first surface and a periphery 24 defined thereabout.” (Office Action, page 2). Applicants respectfully disagree.

Malhi discloses a socket configured to facilitate the testing of an integrated circuit chip. The socket includes a socket unit 20 mounted within a socket frame 21 and a hinged frame lid 23. The socket unit 20 includes, among other things, a substrate 30 coupled with a foundation plate 27 both of which are mounted within a socket block 24. A compliant layer 31 is disposed on the substrate 30 and a connection circuit 32 adjoins the compliant layer 31. Wire bonds 25 are coupled between the connection circuit 32 and connector pins 26 extending through the socket block 24. Solder bumps 33 are attached to the connection circuit and provide an electrical interconnection with the semiconductor chip 11 which is to be tested. (See, e.g., col. 4, lines 45-62; FIG. 2).

Applicant maintains the position that the electrical connection circuit (32) of Malhi does not read on the limitation of a plurality of electrically conductive discrete pads with associated limitations as set forth in claim 1 of the presently claimed invention. However, assuming *arguendo* that Malhi teaches a plurality of electrically conductive discrete pads as set forth in claim 1 of the presently claimed invention, Malhi clearly does not teach a sheet-like, nonconductive structure having *a first zone defined on the first surface adjacent the peripheral edge and a second zone defined on the first surface, wherein the second zone is located interiorly of, and circumscribed by, the first zone* and wherein each of a *first plurality* of electrically conductive discrete pads is *disposed within the first zone* and each of a *second plurality* of electrically conductive discrete pads is *located within the second zone*.

As such, Applicants submit that claim 1 is clearly allowable over Malhi. Applicants further submit that claims 2 through 4 are allowable over Malhi as being dependent from an allowable base claim as well as for the additional patentable subject matter introduced thereby.

With respect to claim 2, Applicants submit that Malhi fails to teach at least one conductor extending between at least one of the first plurality of electrically conductive discrete pads and at least one of the second plurality of electrically conductive discrete pads, and wherein the at least one conductor including at least a portion external to the sheet-like nonconductive structure. While the Examiner states that Malhi discloses a “conductor extending between at least two of ...the plurality of electrically conductive discrete pads” (Office Action, page 3), the Examiner has not pointed to any specific teaching other than referring to FIG. 2. Applicant submits that FIG. 2 clearly does not show a conductor extending between two different “electrically conductive discrete pads” of the electrical connection circuit (32).

Applicant, therefore, respectfully requests reconsideration and allowance of claims 1 through 4.

ENTRY OF AMENDMENTS

The amendments to claims 1 and 2 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application.

CONCLUSION

Claims 1 through 4 and 15 through 27 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bradley B. Jensen", followed by a long horizontal flourish.

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